

**Experiment Number:** 99031-01

**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:41

**First Dose M/F:** NA / NA

**Lab:** BAT

**C Number:** C99031  
**Lock Date:** 10/07/2004  
**Cage Range:** All  
**Date Range:** All  
**Reasons For Removal:** All  
**Removal Date Range:** All  
**Treatment Groups:** All  
**Study Gender:** Both  
**PWG Approval Date** NONE

Experiment Number: 99031-01

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CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:41

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male  
0 MG/KG**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Parasite Metazoan	1										1 1.0
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatodiaphragmatic Nodule					X						1
Inflammation, Chronic	1	1	1	1	1						5 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Acinus, Atrophy					1						1 1.0
Infiltration Cellular, Lymphocyte	1		1		1						3 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic			1								1 1.0

**Cardiovascular System**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

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CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:41

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male**  
**0 MG/KG**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

**\*TOTALS**

Cardiomyopathy

1 1 1 1 1 1 1 1 1 1 1.0

**Endocrine System**

Adrenal Cortex

+ + + + + + + + + + 10

Vacuolization Cytoplasmic

1 1 1 1 1 1 1 1 1 1 10 1.0

Adrenal Medulla

+ + + + + + + + + + 10

Islets, Pancreatic

+ + + + + + + + + + 10

Parathyroid Gland

+ M + M + + + + + + 8

Pituitary Gland

+ + + + + + + + + + 10

Thyroid Gland

+ + + + + + + + + + 10

**General Body System**

NONE

**Genital System**

Epididymis

+ + + + + + + + + + 10

Preputial Gland

+ + + + + + + + + + 10

Prostate

+ + + + + + + + + + 10

Seminal Vesicle

+ + + + + + + + + + 10

Testes

+ + + + + + + + + + 10

**Hematopoietic System**

Bone Marrow

+ + + + + + + + + + 10

Lymph Node, Mandibular

M M M M M M M M M M 0

Lymph Node, Mesenteric

+ + + + + + + + + + 10

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Species/Strain: Rat/F 344/N

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Date Report Requested: 10/22/2014

Time Report Requested: 18:40:41

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
0 MG/KG

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Lymph Node, Mesenteric

+ + + + + + + + + +

10

Spleen

+ + + + + + + + + +

10

Thymus

+ + + + + + + + + +

10

Integumentary System

Mammary Gland

+ + + + + + + + + +

10

Skin

+ + + + + + + + + +

10

Musculoskeletal System

Bone

+ + + + + + + + + +

10

Nervous System

Brain

+ + + + + + + + + +

10

Respiratory System

Lung

+ + + + + + + + + +

10

Alveolar Epith, Hyperplasia, Focal

1 1 1 1 1 1 1

5 1.0

Alveolus, Infiltration Cellular, Histiocyte,  
Focal

1 1 1 1 1 1 1

6 1.0

Metaplasia, Osseous

1

1 1.0

Nose

+ + + + + + + + + +

10

Inflammation, Acute

1

1 1.0

Olfactory Epi, Metaplasia, Respiratory

1

1 1.0

Trachea

+ + + + + + + + + +

10

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

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I ..Insufficient tissue

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**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:41

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Male  
0 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Special Senses System**

|                                   |   |   |   |   |   |   |   |   |   |     |    |
|-----------------------------------|---|---|---|---|---|---|---|---|---|-----|----|
| Eye                               | + | + | + | + | + | + | + | + | + | +   | 10 |
| Harderian Gland                   | + | + | + | + | + | + | + | + | + | +   | 10 |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   | 1 |   |   | 1 | 1.0 |    |

**Urinary System**

|                 |   |   |   |   |   |   |   |   |   |   |     |
|-----------------|---|---|---|---|---|---|---|---|---|---|-----|
| Kidney          | + | + | + | + | + | + | + | + | + | + | 10  |
| Mineralization  |   |   |   |   | 1 | 1 |   | 1 | 1 | 1 |     |
| Nephropathy     | 1 | 1 | 1 | 1 | 1 | 1 |   | 1 |   | 7 | 1.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | 10  |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

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Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:41

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
62.5 MG/KG

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Alimentary System

|                          |   |   |   |   |   |   |   |   |   |   |        |
|--------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Liver                    | + | + | + | + | + | + | + | + | + | + | 10     |
| Hepatocyte, Fatty Change | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 10 1.4 |
| Hepatocyte, Hypertrophy  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.0 |
| Inflammation, Chronic    | 1 | 1 |   |   | 1 |   | 1 | 1 |   | 1 | 6 1.0  |

Cardiovascular System

NONE

Endocrine System

|                             |   |   |   |   |   |   |   |   |   |   |        |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Adrenal Cortex              | + | + | + | + | + | + | + | + | + | + | 10     |
| Vacuolization Cytoplasmic   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.0 |
| Thyroid Gland               | + | + | + | + | + | + | + | + | + | + | 10     |
| Follicular Cel, Hypertrophy | 1 | 1 |   |   | 1 |   | 1 | 1 |   | 1 | 2 1.0  |

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

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**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:41

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Male  
62.5 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

Foreign Body

X 1

Goblet Cell, Hyperplasia

1 1 1.0

Goblet Cell, Respirat Epith, Hyperplasia

1 1 1.0

Inflammation, Chronic

1 1 1.0

Respirat Epith, Hyperplasia

1 1 1.0

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Nephropathy

1 1 1 1 1 1 1 1 7 1.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

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CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:41

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
125 MG/KG

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Alimentary System

|                          |   |   |   |   |   |   |   |   |   |   |        |
|--------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Liver                    | + | + | + | + | + | + | + | + | + | + | 10     |
| Hepatocyte, Fatty Change | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 10 1.7 |
| Hepatocyte, Hypertrophy  | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 10 1.2 |
| Inflammation, Chronic    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   | 8 1.0  |

Cardiovascular System

NONE

Endocrine System

|                           |   |   |   |   |   |   |   |   |   |   |        |
|---------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Adrenal Cortex            | + | + | + | + | + | + | + | + | + | + | 10     |
| Vacuolization Cytoplasmic | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 10 1.1 |
| Thyroid Gland             | + | + | + | + | + | + | + | + | + | + | 10     |

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

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+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

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BLANK ..Not examined microscopically

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**Species/Strain:** Rat/F 344/N

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**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:41

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Male  
125 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Musculoskeletal System**

NONE

**Nervous System**

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

Goblet Cell, Hyperplasia

1 1.0

Respirat Epith, Hyperplasia

1 1.0

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Nephropathy

1 1 1 1 1 1 1 1 1 7 1.0

Renal Tubule, Accumulation, Hyaline Droplet

2 1 2.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

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**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:41

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Male  
250 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

|                          |   |   |   |   |   |   |   |   |   |   |        |
|--------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Liver                    | + | + | + | + | + | + | + | + | + | + | 10     |
| Hepatocyte, Fatty Change | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 10 1.8 |
| Hepatocyte, Hypertrophy  | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 10 1.7 |
| Inflammation, Chronic    | 1 | 1 | 1 |   | 1 | 1 | 1 | 1 | 1 | 1 | 9 1.0  |
| Necrosis                 |   |   |   |   |   |   |   | 1 |   | 1 | 1.0    |

**Cardiovascular System**

NONE

**Endocrine System**

|                             |   |   |   |   |   |   |   |   |   |   |        |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Adrenal Cortex              | + | + | + | + | + | + | + | + | + | + | 10     |
| Vacuolization Cytoplasmic   | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 10 1.4 |
| Thyroid Gland               | + | + | + | + | + | + | + | + | + | + | 10     |
| Follicular Cel, Hypertrophy | 1 |   | 2 |   |   |   |   | 1 |   | 3 | 1.3    |

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

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M ..Missing tissue

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BLANK ..Not examined microscopically

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**Species/Strain:** Rat/F 344/N

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**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:41

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Male  
250 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

Foreign Body

X 1

Goblet Cell, Respirat Epith, Hyperplasia

1 1 1.0

Inflammation, Chronic Active

1 1 1.0

Transit Epithe, Hyperplasia

1 1 1.0

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Nephropathy

1 1 1 1 1 1 6 1.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:41

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
500 MG/KG

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Alimentary System

|                          |   |   |   |   |   |   |   |   |   |   |        |
|--------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Liver                    | + | + | + | + | + | + | + | + | + | + | 10     |
| Hepatocyte, Fatty Change | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 10 1.7 |
| Hepatocyte, Hypertrophy  | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 10 2.2 |
| Inflammation, Chronic    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 1.0  |

Cardiovascular System

NONE

Endocrine System

|                             |   |   |   |   |   |   |   |   |   |   |        |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Adrenal Cortex              | + | + | + | + | + | + | + | + | + | + | 10     |
| Vacuolization Cytoplasmic   | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 10 1.9 |
| Thyroid Gland               | + | + | + | + | + | + | + | + | + | + | 10     |
| Follicular Cel, Hypertrophy | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.3 |

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 99031-01

**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:41

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Male  
500 MG/KG**

| DAY ON TEST |                |   |   |   |   |   |   |   |   |   |
|-------------|----------------|---|---|---|---|---|---|---|---|---|
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9              | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3              | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 4              | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
|             | 1              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|             | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |   |

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

Goblet Cell, Respirat Epith, Hyperplasia

1 1 1 1 1 1 1 1 1 1 1 1.0

Olfactory Epi, Metaplasia, Respiratory

1 1 1 1 1 1 1 1 1 1 1.0

Olfactory Epi, Pigmentation

1 1 1 1 1 1 1 1 1 1 5 1.0

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Nephropathy

1 1 1 1 1 1 1 1 1 1 6 1.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:41

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male  
1000 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**\*TOTALS****Alimentary System**

|                            |   |   |   |   |   |   |   |   |   |   |        |
|----------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Esophagus                  | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Large, Cecum     | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Large, Colon     | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Large, Rectum    | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Small, Duodenum  | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Small, Ileum     | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Small, Jejunum   | + | + | + | + | + | + | + | + | + | + | 10     |
| Liver                      | + | + | + | + | + | + | + | + | + | + | 10     |
| Bile Duct, Hyperplasia     |   |   |   |   |   | 1 |   |   |   |   | 1 1.0  |
| Hepatocyte, Fatty Change   | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 10 1.3 |
| Hepatocyte, Hypertrophy    | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 10 3.0 |
| Hepatodiaphragmatic Nodule |   |   |   |   | X |   |   |   |   |   | 1      |
| Inflammation, Chronic      | 1 |   | 1 |   | 1 | 1 | 1 |   | 1 |   | 6 1.0  |
| Pancreas                   | + | + | + | + | + | + | + | + | + | + | 10     |
| Salivary Glands            | + | + | + | + | + | + | + | + | + | + | 10     |
| Stomach, Forestomach       | + | + | + | + | + | + | + | + | + | + | 10     |
| Stomach, Glandular         | + | + | + | + | + | + | + | + | + | + | 10     |
| Inflammation, Chronic      | 1 |   |   |   |   |   |   |   |   |   | 1 1.0  |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart        | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:42

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male  
1000 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**\*TOTALS**

Cardiomyopathy

1 1 2 1 1 1 1 1 1 7 1.1

**Endocrine System**

|                             |   |   |   |   |   |   |   |   |   |   |        |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Adrenal Cortex              | + | + | + | + | + | + | + | + | + | + | 10     |
| Vacuolization Cytoplasmic   | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 10 1.7 |
| Adrenal Medulla             | + | + | + | + | + | + | + | + | + | + | 10     |
| Islets, Pancreatic          | + | + | + | + | + | + | + | + | + | + | 10     |
| Parathyroid Gland           | + | + | + | + | + | + | + | + | + | + | 10     |
| Pituitary Gland             | + | + | + | + | + | + | + | + | + | + | 10     |
| Thyroid Gland               | + | + | + | + | + | + | + | + | + | + | 10     |
| Follicular Cel, Hypertrophy | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 10 2.0 |

**General Body System**

NONE

**Genital System**

|                 |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Epididymis      | + | + | + | + | + | + | + | + | + | + | 10 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Prostate        | + | + | + | + | + | + | + | + | + | + | 10 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | 10 |
| Testes          | + | + | + | + | + | + | + | + | + | + | 10 |

**Hematopoietic System**

|                        |   |   |   |   |   |   |   |   |   |   |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow            | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | 0  |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:42

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male**  
**1000 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**\*TOTALS**

Lymph Node, Mandibular  
Lymph Node, Mesenteric  
Spleen  
Thymus

|   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|----|
| M | M | M | M | M | M | M | M | M | M | 0  |
| + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | 10 |

**Integumentary System**

Mammary Gland  
Skin

|   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | 10 |
| + | + | + | + | + | + | + | + | + | + | 10 |

**Musculoskeletal System**

Bone

|   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

**Nervous System**

Brain

|   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

**Respiratory System**

Lung  
Alveolar Epith, Hyperplasia, Focal  
Alveolus, Infiltration Cellular, Histiocyte,  
Focal  
Interstitial, Inflammation  
Metaplasia, Osseous  
Nose  
Inflammation, Chronic  
Olfactory Epi, Pigmentation

|   |   |   |   |   |   |   |   |   |   |       |
|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | 10    |
|   |   |   |   |   |   |   |   |   |   | 1 1.0 |
| 1 |   |   |   |   |   |   |   |   |   | 1 1.0 |
|   |   |   |   |   |   |   |   |   |   | 1 1.0 |
|   |   |   |   |   |   |   |   |   |   | 1 1.0 |
|   |   |   |   |   |   |   |   |   |   | 1 1.0 |
|   |   |   |   |   |   |   |   |   |   | 7 1.0 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:42

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
1000 MG/KG

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Trachea

+ + + + + + + + + + 10

Special Senses System

Eye

+ + + + + + + + + + 10

Harderian Gland

+ + + + + + + + + + 10

Urinary System

Kidney

+ + + + + + + + + + 10

Mineralization

1 1 1 1 1 1 1 1 1 1 4 1.0

Nephropathy

1 1 1 1 1 1 1 1 1 1 8 1.0

Urinary Bladder

+ + + + + + + + + + 10

\*\*\*END OF MALE DATA\*\*\*

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:42

First Dose M/F: NA / NA

Lab: BAT

| <b>F 344/N Rat Female</b><br><b>0 MG/KG</b> | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|   |             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
|   |             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

## Alimentary System

|                                   |   |   |   |   |   |   |   |   |   |   |       |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                         | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Cecum            | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Colon            | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Rectum           | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Duodenum         | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Ileum            | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Jejunum          | + | + | + | + | + | + | + | + | + | + | 10    |
| Liver                             | + | + | + | + | + | + | + | + | + | + | 10    |
| Hepatodiaphragmatic Nodule        |   |   |   |   | X |   |   |   |   |   | 1     |
| Inflammation, Chronic             |   | 1 |   |   | 1 | 1 |   | 1 | 1 |   | 5 1.0 |
| Pancreas                          | + | + | + | + | + | + | + | + | + | + | 10    |
| Infiltration Cellular, Lymphocyte |   | 1 |   |   |   |   |   | 2 |   | 2 | 1.5   |
| Inflammation, Chronic             |   |   |   |   | 1 |   |   |   |   | 1 | 1.0   |
| Salivary Glands                   | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Forestomach              | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Glandular                | + | + | + | + | + | + | + | + | + | + | 10    |

## Cardiovascular System

|                |   |   |   |   |   |   |   |   |   |   |     |
|----------------|---|---|---|---|---|---|---|---|---|---|-----|
| Blood Vessel   | + | + | + | + | + | + | + | + | + | + | 10  |
| Heart          | + | + | + | + | + | + | + | + | + | + | 10  |
| Cardiomyopathy | 1 | 1 | 1 |   |   |   |   |   |   | 3 | 1.0 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:42

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female  
0 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**\*TOTALS****Endocrine System**

|                    |   |   |   |   |   |   |   |   |   |     |    |
|--------------------|---|---|---|---|---|---|---|---|---|-----|----|
| Adrenal Cortex     | + | + | + | + | + | + | + | + | + | +   | 10 |
| Adrenal Medulla    | + | + | + | + | + | + | + | + | + | +   | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | +   | 10 |
| Parathyroid Gland  | + | + | + | + | + | + | + | + | + | +   | 10 |
| Pituitary Gland    | + | + | + | + | + | + | + | + | + | +   | 10 |
| Thyroid Gland      | + | + | + | + | + | + | + | + | + | +   | 10 |
| Cyst               | X |   |   |   |   |   |   |   |   |     | 1  |
| Ectopic Thymus     |   |   |   |   |   |   | 2 | 1 | 2 | 1.5 |    |

**General Body System**

NONE

**Genital System**

|                                  |   |   |   |   |   |   |   |   |   |     |    |
|----------------------------------|---|---|---|---|---|---|---|---|---|-----|----|
| Clitoral Gland                   | + | + | + | + | + | + | + | + | + | +   | 10 |
| Ovary                            | + | + | + | + | + | + | + | + | + | +   | 10 |
| Uterus                           | + | + | + | + | + | + | + | + | + | +   | 10 |
| Endometrium, Hyperplasia, Cystic |   |   |   |   |   | 1 | 1 |   | 2 | 1.0 |    |

**Hematopoietic System**

|                        |   |   |   |   |   |   |   |   |   |   |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow            | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | 0  |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | 10 |
| Spleen                 | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:42

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female  
0 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**\*TOTALS**

|  |   |   |   |   |   |   |   |     |   |   |       |
|--|---|---|---|---|---|---|---|-----|---|---|-------|
| Spleen   | + | + | + | + | + | + | + | +   | + | + | 10    |
| Thymus   | + | + | + | + | + | + | + | +   | + | + | 10    |
| <b>Integumentary System</b>                        |   |   |   |   |   |   |   |     |   |   |       |
| Mammary Gland                                      | + | + | + | + | + | + | + | +   | + | + | 10    |
| Skin   | + | + | + | + | + | + | + | +   | + | + | 10    |
| <b>Musculoskeletal System</b>                      |   |   |   |   |   |   |   |     |   |   |       |
| Bone   | + | + | + | + | + | + | + | +   | + | + | 10    |
| <b>Nervous System</b>                              |   |   |   |   |   |   |   |     |   |   |       |
| Brain  | + | + | + | + | + | + | + | +   | + | + | 10    |
| <b>Respiratory System</b>                          |   |   |   |   |   |   |   |     |   |   |       |
| Lung   | + | + | + | + | + | + | + | +   | + | + | 10    |
| Alveolar Epith, Hyperplasia, Focal                 |   |   |   |   |   |   |   | 1   |   |   | 1 1.0 |
| Alveolus, Infiltration Cellular, Histiocyte, Focal |   |   |   |   | 1 | 1 | 1 |     |   |   | 3 1.0 |
| Metaplasia, Osseous                                | 1 |   |   |   |   |   |   |     |   |   | 1 1.0 |
| Pigmentation, Hemosiderin                          |   | 1 |   |   |   |   |   |     |   |   | 1 1.0 |
| Nose   | + | + | + | + | + | + | + | +   | + | + | 10    |
| Foreign Body                                       |   |   |   |   |   |   |   | X X |   |   | 2     |
| Inflammation, Chronic                              |   |   |   |   |   |   |   | 1 1 |   |   | 2 1.0 |
| Olfactory Epi, Metaplasia, Respiratory             |   |   |   |   | 1 |   |   |     |   |   | 1 1.0 |
| Respirat Epi, Hyperplasia                          |   |   |   |   |   |   | 1 | 1   |   |   | 2 1.0 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:42

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0 MG/KG

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Transit Epithe, Hyperplasia 1 1 1.0

Trachea + + + + + + + + + + 10

Special Senses System

Eye + + + + + + + + + + 10

Harderian Gland + + + + + + + + + + 10

Urinary System

Kidney + + + + + + + + + + 10

Mineralization 1 1 1 1 1 1 6 1.0

Nephropathy 1 1 1.0

Urinary Bladder + + + + + + + + + + 10

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 99031-01

**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:42

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Female  
62.5 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

|                            |   |   |   |   |   |   |   |   |   |   |     |
|----------------------------|---|---|---|---|---|---|---|---|---|---|-----|
| Liver                      | + | + | + | + | + | + | + | + | + | + | 10  |
| Hepatocyte, Hypertrophy    |   |   |   |   |   |   | 1 |   |   | 1 | 1.0 |
| Hepatodiaphragmatic Nodule |   |   |   |   |   |   | X |   |   |   | 1   |
| Inflammation, Chronic      | 1 |   | 1 | 1 | 1 |   | 1 | 1 |   | 6 | 1.0 |

**Cardiovascular System**

NONE

**Endocrine System**

Thyroid Gland

|   |   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
|---|---|---|---|---|---|---|---|---|---|---|----|

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 99031-01

**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:42

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Female  
62.5 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

NONE

**Nervous System**

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

1 1 1.0

Olfactory Epi, Metaplasia, Respiratory

**Special Senses System**

NONE

**Urinary System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 99031-01

**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:42

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Female  
125 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

Liver

+ + + + + + + + + + 10

Inflammation, Chronic

1 1 1 1 1 1 1 1 1 7 1.0

**Cardiovascular System**

NONE

**Endocrine System**

Thyroid Gland

+ + + + + + + + + + 10

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 99031-01

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/22/2014

**Test Type:** 90-DAY

## **Route: Gavage**

**Species/Strain:** Rat/F 344/N

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Time Report Requested:** 18:40:42

**First Dose M/F:** NA / NA

## Lab: BAT

**F 344/N Rat Female  
125 MG/KG**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

NONE

## Respiratory System

## Nose

Inflammation, Chronic Active  
Olfactory Epi, Atrophy  
Olfactory Epi, Pigmentation  
Respirat Epith, Hyperplasia

|   |   |   |   |   |   |   |   |   |   |   |    |     |  |
|---|---|---|---|---|---|---|---|---|---|---|----|-----|--|
| + | + | + | + | + | + | + | + | + | + | + | 10 |     |  |
| 1 |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |  |
| 1 |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |  |
| 1 | 1 | 1 | 1 |   |   |   |   |   |   | 1 | 5  | 1.0 |  |
| 1 |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |  |

## **Special Senses System**

NONE

## Urinary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

± ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

#### A ..Autolysis precludes evaluation

| ..Insufficient tissue

BLANK ..Not examined microscopically

#### 1-4 ..Lesion qualified as

1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:42

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
250 MG/KG

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Alimentary System

|                            |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Liver                      | + | + | + | + | + | + | + | + | + | + | 10    |
| Hepatodiaphragmatic Nodule |   |   |   |   |   |   |   |   | X |   | 1     |
| Inflammation, Chronic      |   |   |   |   | 1 | 1 | 1 | 1 | 1 |   | 5 1.0 |

Cardiovascular System

NONE

Endocrine System

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | 10 |
|---------------|---|---|---|---|---|---|---|---|---|---|----|

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 99031-01

**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:42

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Female  
250 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Nervous System**

NONE

**Respiratory System**

Nose

+

Olfactory Epi, Pigmentation

1 1 1 1 1

5 1.0

**Special Senses System**

NONE

**Urinary System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 99031-01

**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:42

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Female  
500 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

|                            |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Liver                      | + | + | + | + | + | + | + | + | + | + | 10    |
| Hepatocyte, Hypertrophy    | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |   | 9 1.2 |
| Hepatodiaphragmatic Nodule |   |   |   |   |   | X |   |   |   |   | 1     |
| Inflammation, Chronic      | 1 | 1 | 1 | 1 | 2 |   | 1 |   | 1 | 1 | 8 1.1 |

**Cardiovascular System**

NONE

**Endocrine System**

|                             |   |   |   |   |   |   |   |   |   |   |       |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Thyroid Gland               | + | + | + | + | + | + | + | + | + | + | 10    |
| Follicular Cel, Hypertrophy |   |   |   | 1 |   |   | 1 | 1 |   |   | 3 1.0 |

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 99031-01

**Test Type:** 90-DAY

**Route:** Gavage

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Ginkgo biloba extract

**CAS Number:** 90045-36-6

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 18:40:43

**First Dose M/F:** NA / NA

**Lab:** BAT

**F 344/N Rat Female  
500 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Musculoskeletal System**

NONE

**Nervous System**

NONE

**Respiratory System**

Nose

|                              |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
|                              | + | + | + | + | + | + | + | + | + | + | 10    |
| Inflammation, Chronic Active |   |   |   |   | 1 |   |   |   |   |   | 1 1.0 |
| Olfactory Epi, Atrophy       |   |   |   | 2 |   |   | 1 |   | 1 |   | 3 1.3 |
| Olfactory Epi, Pigmentation  | 1 | 1 | 2 |   | 1 | 1 | 2 | 1 | 1 | 1 | 9 1.2 |
| Transit Epithe, Hyperplasia  |   |   |   |   | 1 |   |   |   |   |   | 1 1.0 |

**Special Senses System**

NONE

**Urinary System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99031-01

Test Type: 90-DAY

Route: Gavage

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Ginkgo biloba extract

CAS Number: 90045-36-6

Date Report Requested: 10/22/2014

Time Report Requested: 18:40:43

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female**  
**1000 MG/KG**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

**\*TOTALS****Alimentary System**

|                                   |   |   |   |   |   |   |   |   |   |   |        |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Esophagus                         | + | + | + | + | + | + | + | + | + | + | 10     |
| Muscularis, Inflammation, Chronic | 2 |   |   |   |   |   |   | 1 |   |   | 2 1.5  |
| Intestine Large, Cecum            | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Large, Colon            | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Large, Rectum           | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Small, Duodenum         | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Small, Ileum            | + | + | + | + | + | + | + | + | + | + | 10     |
| Intestine Small, Jejunum          | + | + | + | + | + | + | + | + | + | + | 10     |
| Liver                             | + | + | + | + | + | + | + | + | + | + | 10     |
| Hepatocyte, Hypertrophy           | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.1 |
| Inflammation, Chronic             | 1 | 1 |   |   | 1 |   |   | 1 | 1 | 1 | 6 1.0  |
| Pancreas                          | + | + | + | + | + | + | + | + | + | + | 10     |
| Infiltration Cellular, Lymphocyte |   |   |   |   | 1 |   |   |   |   |   | 1 1.0  |
| Salivary Glands                   | + | + | + | + | + | + | + | + | + | + | 10     |
| Stomach, Forestomach              | + | + | + | + | + | + | + | + | + | + | 10     |
| Stomach, Glandular                | + | + | + | + | + | + | + | + | + | + | 10     |

**Cardiovascular System**

|                |   |   |   |   |   |   |   |   |   |   |       |
|----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Blood Vessel   | + | + | + | + | + | + | + | + | + | + | 10    |
| Heart          | + | + | + | + | + | + | + | + | + | + | 10    |
| Cardiomyopathy | 1 | 1 |   | 1 |   |   | 1 | 1 | 1 |   | 6 1.0 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Endocrine System

|                             |   |   |   |   |   |   |   |   |   |     |    |
|-----------------------------|---|---|---|---|---|---|---|---|---|-----|----|
| Adrenal Cortex              | + | + | + | + | + | + | + | + | + | +   | 10 |
| Adrenal Medulla             | + | + | + | + | + | + | + | + | + | +   | 10 |
| Islets, Pancreatic          | + | + | + | + | + | + | + | + | + | +   | 10 |
| Parathyroid Gland           | + | + | + | + | M | + | + | + | + | +   | 9  |
| Pituitary Gland             | + | + | + | + | + | + | + | + | + | +   | 10 |
| Thyroid Gland               | + | + | + | + | + | + | + | + | + | +   | 10 |
| Follicular Cel, Hypertrophy |   | 1 | 1 | 1 |   | 1 |   | 1 | 5 | 1.0 |    |

General Body System

NONE

Genital System

|                                  |   |   |   |   |   |   |   |   |   |     |    |
|----------------------------------|---|---|---|---|---|---|---|---|---|-----|----|
| Clitoral Gland                   | + | + | + | + | + | + | + | + | + | +   | 10 |
| Ovary                            | + | + | + | + | + | + | + | + | + | +   | 10 |
| Uterus                           | + | + | + | + | + | + | + | + | + | +   | 10 |
| Endometrium, Hyperplasia, Cystic |   |   |   |   |   |   | 1 |   | 1 | 1.0 |    |

Hematopoietic System

|                        |   |   |   |   |   |   |   |   |   |   |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow            | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | 0  |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | 10 |
| Spleen                 | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus                 | + | + | + | + | + | + | + | + | + | + | 10 |

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|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

**\*TOTALS**

Thymus

+ + + + + + + + + + 10

**Integumentary System**

Mammary Gland

+ + + + + + + + + + 10

Skin

+ + + + + + + + + + 10

**Musculoskeletal System**

Bone

+ + + + + + + + + + 10

**Nervous System**

Brain

+ + + + + + + + + + 10

**Respiratory System**

Lung

+ + + + + + + + + + 10

Alveolar Epith, Hyperplasia, Focal

1 1 2 3 1.3

Alveolus, Infiltration Cellular, Histiocyte,  
Focal

1 1 2 1.0

Infiltration Cellular, Histiocyte, Focal

2 1 2.0

Pigmentation, Hemosiderin

2 1 2.0

Nose

+ + + + + + + + + + 10

Glands, Goblet Cell, Hyperplasia

2 1 2.0

Inflammation, Chronic

1 1 1 1.0

Inflammation, Chronic Active

1 1 1 1.0

Olfactory Epi, Atrophy

2 3 2 3 2.3

Olfactory Epi, Pigmentation

2 2 1 7 1.6

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|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

\*TOTALS

Transit Epithe, Hyperplasia 1 1 1.0

Trachea + + + + + + + + + + 10

Special Senses System

Eye + + + + + + + + + + 10

Harderian Gland + + + + + + + + + + 10

Infiltration Cellular, Lymphocyte 3 1 3.0

Urinary System

Kidney + + + + + + + + + + 10

Mineralization 1 1 1 1 1 1 1 1 1 1 5 1.0

Nephropathy 1 1 1 1 1 1 1 1 1 1 2 1.0

Urinary Bladder + + + + + + + + + + 10

\*\* END OF REPORT \*\*

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